

## TBLE-1220-35 & K Um6fcUXVubX@jby'9l HybXYf

### TBLE-1220-35 2 Way CATV 1220 MHz Broadband Line Extender with GaAs-Hybrid / Power Doubling Technology, 35 dB Gain

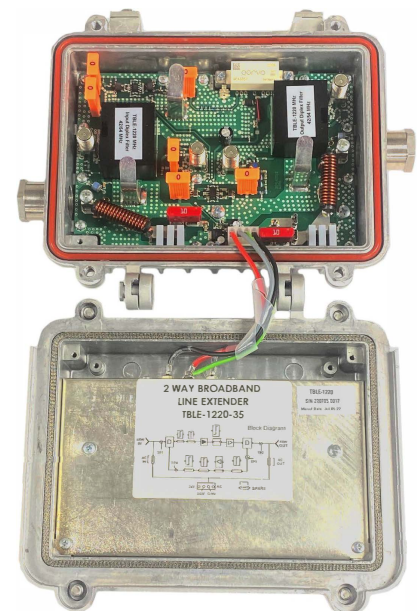
#### Features:



- Bandwidth to 1220 MHz
- Gain of 35 dB Forward, 20 dB Reverse
- Three Diplex Filter Options
- GaAs FET Hybrid
- DOCSIS 2.1 Bandwidth Compliant
- 5/8-24 CH Type Connections in a Steel Bushing
- Surge Protection On All Ports
- -30 dB Test Ports
- JXP Style Plug In Pads
- 30 to 90 VAC Powering (Only 8 Watts)
- IP-65 Rated Housing, -100 dB RFI
- 6 kV Surge Protected

The Toner TBLE-1220-35 Line Extender Amplifier is a new version of our TBLE series amplifiers with many new features. The TBLE-1220-35 has Gallium Arsenide (GaAs FET) hybrid providing high RF output while maintaining low distortion characteristics. The amplifier has a 5-1220 MHz bandwidth which is ideal for systems deploying DOCSIS 3.1 or planning on deploying it in the future. The TBLE-1220-35 line extender also features field installable diplex filter sets that allow upgrading from 42/54 MHz split to 85/102 MHz or 204/1220 MHz as needed. The amplifier is supplied with stock 42/54 MHz diplex filters.

Built in a rugged die cast aluminum housing with an IP-65 rating. The amplifier has a switching mode power supply for line powering from 30 to 90 VAC. Forward gain of this amplifier is 35 dB and it has 25 dB of reverse gain. Setup and control of the amplifier is by use of industry standard JXP style plug in attenuator pads in both the attenuation and equalizer sockets where the attenuator is turned into an equalizer. This simplifies setup and reduces the need for separate devices. JXP-\* pads are available from 1 to 26 dB in 1 dB steps.



# TBLE-220-35 & K Um6fcUXVubX@jBY'9I HbXYf

## Specifications

Parameter	Notes	Forward GaAs-FET Push Pull	Reverse	Units
<b>Bandwidth</b>		54/102/258 to 1220	5 to 42/85/204	MHz
<b>Min Full Gain</b>		35	25	dB
<b>Flatness</b>		+/-1.2	+/-1	dB
<b>Return Loss, IN / OUT</b>		-16	-16	dB
<b>RF Test Points</b>	IN / OUT	-30	-30	dB
<b>Gain Control, variable</b>		0-20 (input)	0-20 (output)	dB
<b>Slope Control, variable</b>		0-20 (input)	---	dB
<b>Fixed Equalizers</b>		0 to 26 with 1dB steps (midstage)	---	dB
<b>Forward Distortions, 79 channels:</b>	42dBmV Flat Output			
<b>CTB</b>	on ch78	-63	---	dBc
<b>CSO</b>	on ch78	-66	---	dBc
<b>Xmod</b>	on ch2	-60	---	dBc
<b>Forward Distortions, 79 channels:</b>	12dB interstage slope (54-1000 MHz),ref 32/44dBmV			
<b>CTB</b>	on ch78	-67	---	dBc
<b>CSO</b>	on ch78	-70	---	dBc
<b>Xmod</b>	on ch2	-63	---	dBc
<b>Reverse Distortions, 4 ch</b>	52dBmV flat output			
<b>3rd on T10</b>	T8+T9-T7	---	-68	dBc
<b>2nd on T9</b>	T7+12MHz	---	-65	dBc
<b>Xmod on T10</b>	T7, T8, T9, T10	---	-64	dBc
<b>Noise Figure</b>		7	7	dB
<b>Fwd Group Delay:</b>	55.25-58.83MHz	max.35	---	nsec
<b>Rev Group Delay:</b>	41-42MHz	---	max.30	nsec
<b>Hum Modulation</b>		-70	---	dB
<b>RFI Isolation</b>	5-1000MHz	-100	---	dB
<b>Surge Withstand</b>	IN / OUT	IEEE C62.41-1991 Category B3, Combination Wave 6KV, 3KA		
<b>AC Input</b>	Only from Input	30-90	VAC	
<b>Power Consumption</b>		8.0	Watts	
<b>Temperature</b>		-40 to 130° F (-40 to +55° C)		
<b>Environmental Protection</b>		Painted housing with stainless bushings & hardware		
<b>Weight</b>		1.6 kgs / 3.6 lbs		
<b>Water Immersion</b>		15psi for 10 seconds @ 20°C		

## Ordering Information:

TBLE-DPX42/54 Duplex Filter Set (Stock)	5-42/54-1220 MHz (Stock from Factory)
TBLE-DPX85/102 Duplex Filter Set	Filter kit consisting of two duplex filter modules & one return EQ JXP for 85/102 MHz frequency range
TBLE-DPX204/258 Duplex Filter Set	Filter kit consisting of two duplex filter modules & one return EQ JXP for 204/258 MHz frequency range